### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter **Report No:** WIR-024349 Address: 333 Burma Road **Date Inspected:** 08-Jun-2011

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name:** Lu Hua Jie **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** OBG

## **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance(QA) Inspector Mr. Shrikant Utekar was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China. The QA Inspector observed and/or found the following:

#### TRIAL ASSEMBLY YARD

This QA Inspector randomly observed the following work in progress.

#### SHIELDED METAL ARC WELDING PROCESS.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 216086 performing the Shielded Metal Arc Welding process on weld 041 located at PCMK SEG3019BB. ZPMC QC Mr. Zhu Yuan Gang was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-U4b-Fcm-1.

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 066733 performing the Shielded Metal Arc Welding process on weld 173 located at PCMK SEG3019BB. ZPMC QC Mr. Zhu Yuan Gang was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2214-Tc-u4b-Fcm-1.

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This Quality Assurance (QA) Inspector observed ZPMC qualified welder 069498 performing the Shielded Metal Arc Welding process on weld 042 located at PCMK SEG3019AV. ZPMC QC Mr. Zhu Yuan Gang was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-B-P-2211-Tc-u4b-Fcm-1.

#### WELD REPAIR

This Quality Assurance (QA) Inspector observed ZPMC qualified welder 070007 performing the Shielded Metal Arc Welding process on weld 012 located at PCMK SEG3019BB. ZPMC QC Mr. Zhu Yuan Gang was monitoring this welding operation. The welding variables recorded by QC appeared to comply with WPS-345-SMAW-3G (3F)-Fcm-Repair-1. Weld repair report identified as B-WR20467.

#### BASE METAL REPAIR

This QA Inspector observed ZPMC qualified welding personnel identified as 044779 Perform Shielded Metal Arc Welding (SMAW) on OBG Segment 14 East side panel between PP128.3 and PP128.7 (Bike path side). VT repair on some locations. ZPMC QC Identified as Zhu Yuan Gang with Critical welding repair report CWR-B-CWR2944. The welding parameters as measured using QC's calibrated instrument appeared to be in general compliance with WPS-345-SMAW-4G (4F) FCM-Repair-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



#### **Summary of Conversations:**

No significant conversations were reported on this date.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, +(86) 1500 042 2372, who represents the Office of Structural Materials for your project.

# WELDING INSPECTION REPORT

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Inspected By:	Utekar, Shrikant	Quality Assurance Inspector
Reviewed By:	Peterson,Art	QA Reviewer